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Deputy Secretary

CERTIFIED MAIL NO. 7005 1820 0001 5711 0390
RETURN RECEIPT REQUESTED

Permittee:

American Eagle Brick Company
P.O. Box 12786
El Paso, TX

NSR Air Quality Permit No. 3532
American Eagle Brick Company
TEMPO No. 3584 – PRN20070001
AIRS No. 35-013-0076

Company Official:

George Cudahy
President

Agency Contact: Elizabeth Bisbey-Kuehn

Mary Uhl
Bureau Chief
Air Quality Bureau

Date of Issuance

Air Quality Permit No. 3532 is issued by the Air Quality Bureau of the New Mexico Environment Department (Department) to **American Eagle Brick Company** (Permittee) pursuant to the Air Quality Control Act (Act) and regulations adopted pursuant to the Act including Title 20, Chapter 2, Part 72 of the New Mexico Administrative Code (NMAC), (20.2.72 NMAC), Construction Permits and is enforceable pursuant to the Act and the air quality control regulations applicable to this source.

This permit authorizes the construction/modification and operation of the **American Eagle Brick Company** (Facility). The function of the Facility is brick manufacturing and can be divided into four sub-processes: raw material handling and storage, crushing, grinding, and brick making. This

Facility is located in Township 29S, Range 04E, Section 15, approximately 2.2 miles southeast of Sunland Park (City Hall), Dona Ana County, New Mexico. The Universal Transverse Mercator (UTM) coordinates for this Facility are UTM E 355205 m, UTM N 3517806 m, and UTM zone 13.

The Department has reviewed the permit application for the proposed construction/modification and has determined that the provisions of the Act and ambient air quality standards will be met. Conditions have been imposed in this permit to assure continued compliance. 20.2.72.210.D. NMAC, states that any term or condition imposed by the Department on a permit is enforceable to the same extent as a regulation of the Environmental Improvement Board.

Pursuant to 20.2.75.11 NMAC, the Department will assess an annual fee for this Facility. This regulation set the fee amount at \$1,500 through 2004 and requires it to be adjusted annually for the Consumer Price Index on January 1. The current fee amount is available by contacting the Department or can be found on the Department's website. The AQB will invoice the Permittee for the annual fee amount at the beginning of each calendar year. This fee does not apply to sources which are assessed an annual fee in accordance with 20.2.71 NMAC. For sources that satisfy the definition of "small business" in 20.2.75.7.F NMAC, this annual fee will be divided by two.

All fees shall be remitted in the form of a corporate check, certified check, or money order made payable to the "NM Environment Department, AQB" mailed to the address shown on the invoice and shall be accompanied by the remittance slip attached to the invoice.

TOTAL EMISSIONS

The total potential emissions from this Facility, excluding exempted activities, are shown in the following table. The emissions limitations for individual units are shown in Specific Condition 2.

Total Potential Criteria Pollutant Emissions from Entire Facility (for information only, not an enforceable condition):

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NO _x)	13.0
Carbon Monoxide (CO)	44.7
Volatile Organic Compounds (VOC)	2.0
Sulfur Dioxide (SO ₂)	5.0
Particulate Matter – total suspended (TSP)	7.4
Particulate Matter less than 10 microns (PM ₁₀)	5.0
Particulate Matter less than 10 microns (PM _{2.5})	5.0

Total Potential HAPS that exceed 0.5 ton per year (for information only, not an enforceable condition):

Pollutant	Emissions (tons per year)
HF	< 9

SECTION I: SPECIFIC CONDITIONS

Pursuant to 20.2.72 NMAC, and the specific regulatory citations in parenthesis, the Facility is subject to the following Specific Conditions.

1. Construction/Modification/Revision and Operation
(20.2.72 NMAC)
 - a. All of the process equipment authorized for this Facility is listed in Table 1.a. shown below (emission units that were identified as exemptions, and equipment not regulated pursuant to the Act are not included).

Table 1.a: Regulated Equipment List

Unit No.	Unit Type	Manufacturer	Model	Date of Mgr.	Serial Number	Process Capacity	NSPS OOO
Crushing Plant and Brick Making Plant							
2	Primary Jaw Crusher	Cedar Rapids	25x40	1958	19841	150 tph	No
3	Screen	Kohlberg Pioneer	71-1D6016	1999	401555	150 tph	No
4	Cone Crusher	Cedar Rapids	RC45STD	1986	22KO386	75 tph	No
5, 6	Conveyors	NA	NA	NA	NA	150 tph	No
21	Dryer	Lingl	NA	1974	El Paso 026	8.5 tph	No
22	Kiln	Lingl	NA	1974	El Paso 026	8.5 tph	No
Grinding Facility²							
8	Single Deck Input Screen	Longhorn Crusher	4x8	2005	40810405-ONS-HD	20 tph	No
10	Conveyor	NA	NA	NA	NA	20 tph	No
11a	Vertical Shaft Impact Mill (VSIM)	Longhorn Crusher	43VSI	1999	12992-ABL-43150	50 tph	No
11b	VSIM Air Classifier	NA	NA	Unknown	NA	3 tph	No
12/13	Recycle Screens	Long Iron	6x10	2006	LS306HLI6101C	47 tph	No
14	Recycle Conveyor (from VSIM)	NA	NA	1970	NA	47 tph	No
15	Recycle Conveyor (to VSIM)	NA	NA	1970	NA	50 tph	No
16	Delivery Conveyor (to Silos)	NA	NA	1970	NA	20 tph	No
20	Extruder (with Pug Mill)	J.C. Steele	75 AD	2004	20040730	23 tph	No
17	Enclosed Screw Conveyor	Martin	12 inch	2005	NA	5 tph	No
18	Enclosed Screw Conveyor	Martin	12 inch	1993	NA	12 tph	No
19a	East Silo (enclosed)	Unknown	NA	1970	NA	100 tons	No
19b	West Silo (enclosed)	Unknown	NA	1970	NA	100 tons	No
19c	Silo 19a Discharge Enclosed Screw Conveyor	Martin	12 inch	1995	NA	23 tph	No
19d	Silo 19b Discharge Enclosed Screw Conveyor	Martin	12 inch	2001	NA	23 tph	No
19e	Silo to Extruder Enclosed Screw Conveyor	Martin	12 inch	1994	NA	23 tph	No
20	Extruder (with Pug Mill)	J.C. Steele	75 AD	2004	20040730	23 tph	No

¹ All to be determined (TBD) values shall be reported to the Department within fifteen (15) days after the startup date of each piece of equipment

² Equipment is fully enclosed in the Grinding Building and all emissions are ducted to the baghouse (Unit 11b).

- b. The following Table 1.b. - Exempted Equipment List is included for information only and as an aid during Facility inspections.

Table 1.b: Exempted Equipment List (20.2.72.202.B. NMAC)

Unit No.	Source Description	Make Model	Serial No.	Capacity	Manufacture Date
1	Generator	Onan 2500 DFM – 17R/2387K	L770284229	225 kW	1977

- c. The facility is authorized to operate during the following times:
1. The kiln (Unit 22) is authorized to operate on a continuous basis.
 2. The primary jaw crusher (Unit 2) is restricted to operate no more than 10 hours per day, from 7 AM to 5 PM, 7 days per week, and 993 hours per year.
 3. The vertical shaft impact mill (Unit 11) is authorized to operate 24 hours per day, 7 days per week, and 2234 hours per year.
 4. The backup generator (Unit 23) shall not operate more than 500 hours per year.

Additionally, the jaw crusher may only operate between the daylight hours of sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year and a given location can be obtained at <http://aa.usno.navy.mil/>. Alternatively, the sunrise and sunset times can be obtained from The Old Farmers Almanac or from <http://www.almanac.com/rise/>).

- d. This Facility is subject to all applicable requirements including, but not limited to, the following regulations listed in Table 1.2:

Table 1.2: Applicable Requirements

Citation	Title
40 CFR Part 50 Subchapter C	Federal Ambient Air Quality Standards
20.2.3 NMAC	Ambient Air Quality Standards
20.2.7 NMAC	Excess Emissions
20.2.61 NMAC	Smoke and Visible Emissions
20.2.72 NMAC	Construction Permits
20.2.73 NMAC	NOI & Emissions Inventory Requirements
20.2.75 NMAC	Construction Permit Fees

- e. The Facility shall be constructed and operated in accordance with all representations in the permit application dated March 21, 2007 and received March 26, 2007, and in the updated amendments dated April 30, 2007, unless modified by conditions of this permit.
- f. Unit 22 shall only combust natural gas containing no more than 5 grains of total sulfur per 100 dry standard cubic foot.
- g. Compression Ignited Internal Combustion engines subject to federal New Source Performance Standards (NSPS) found in 40 CFR 60, Subpart A - General Provisions, and Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines shall comply with both the notification requirements in Subpart A and with the specific requirements of Subpart IIII.
- h. Truck traffic areas, the pit mine haul road, and all portions of the unpaved brick delivery haul road shall be watered and treated with a surface stabilizing agent to control particulate emissions (90% emission control required).

This Specific Condition has been placed in the permit as a result of air dispersion modeling performed by the Department in order to meet state and federal total suspended particulate, PM10, and PM2.5 ambient air quality standards.

- i. The number of haul road round trips transporting raw material on the pit mine haul road shall not exceed 60 round trips per day.
- j. The number of haul road round trips transporting brick product on the delivery haul road shall not exceed 12 round trips per day.
- k. Substitution of equipment is authorized provided the replacement equipment is functionally equivalent and has the same or lower process capacity as the piece of equipment it is replacing in the most recent permit. The replacement equipment shall comply with the opacity requirements in Specific Condition 2.

The Department shall be notified in writing within fifteen (15) days of equipment substitutions.

- l. The raw material stored in storage piles and entering the primary crusher (Unit 2) and the processing equipment shall have a minimum material moisture content of 8% (% by weight). In the event that the material moisture content is less than 8%, the permittee shall apply water to the material and retest the material until the 8% material moisture requirement can be demonstrated.

- m. The baghouse shall control all particulate matter emissions from the vertical shaft impact mill (Unit 11) and Units 8, 10, 12/13, 14, 15, 16, 17, 18, 19a, 19b, 19c, 19d, and 19e.
- n. Units 8, 10, 12/13, 14, 15, 16, 17, 18, 19a, 19b, 19c, 19d, and 19e are grinding process equipment and shall be completely enclosed in the Grinding Building.
- o. The permittee shall perform either Option 1 or Option 2 below to demonstrate minor source status for Hydrogen Fluoride (HF):
 - 1. The fluorine content of the clay used in the bricks shall be determined by laboratory analysis. Once every year, a fluorine content test shall be performed on the clay. The permittee shall use the fluorine content data and the equation developed by Storer-Folt, Cooper, and Boeck as published in the Ceramic Bulletin, Volume 71, Number 4, 1992 to calculate the HF emission rate; or
 - 2. The permittee may demonstrate compliance with a minor source status designation by calculating annual HF emissions using the following emission factor from AP-42, section 11.3:

$$\text{HF Emissions (tons/year)} = (0.37 \text{ lb of HF/ton fired product})(1 \text{ ton HF/2000 lb HF})(\text{tons of product/year})$$

2. Emission Limits

(20.2.72.210 NMAC, paragraphs A and B.1)

- a. The maximum allowable emission limits for this Facility are listed in Table 2.1 and were relied upon by the Department to determine compliance with applicable regulations and ambient air quality standards.

Table 2.1: Allowable Emissions

Unit No.	¹ NO _x pph	NO _x tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO ₂ pph	SO ₂ tpy	TSP pph	TSP tpy	PM ₁₀ pph	PM ₁₀ tpy	PM _{2.5} pph	PM _{2.5} tpy
21	-	-	-	-	<	1.1	-	-	0.7	2.9	0.5	2.2	0.5	2.2
22	3.0	13.0	10.2	44.7	<	0.9	1.1	5.0	0.6	2.8	0.5	2.1	0.4	2.1

¹ Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂

² “-“ indicates that in accordance with the application, emissions of this pollutant are not expected.

³ “<“ indicates that the emissions are less than 0.5 pph or 0.5 tpy and emission limits are not required for this permit.

- b. If during any compliance testing, any crusher, screen, conveyor belt, or conveyor transfer point, exhibits an opacity reading greater than 5% opacity, that emission point shall be equipped with water sprays, a dust collection and control system, a

containment system, (i.e. cyclone, scrubber, baghouse, enclosures over transfer points, conveyor drop chutes), or other equally effective control measures to minimize emissions. The control measures, as required above, shall be installed within 30 days of the compliance test and operated as on an "as needed" basis to meet the opacity limitations contained in this permit. Compliance with this condition shall be determined by opacity test observations conducted in accordance with the procedures in 40 CFR Part 60.11 and Reference Method 9 in 40 CFR Part 60 Appendix A.

- c. Particulate emissions from non-NSPS affected transfer points, belt conveyors, screens, feed bins, and from stockpiles, located outside of the Grinding Building, shall not exhibit greater than 10% opacity. Particulate emissions from non-NSPS crushers located outside of the Grinding Building shall not exhibit greater than 15% opacity.
- d. Stockpiles shall be maintained with standard industry practices and procedures to prevent any visible emission crossing the facility's property boundary, as determined by EPA Method 22.
- e. Sites of overburden removal and active pit areas shall be watered, dependent upon existing wind speeds and soil moisture content, as necessary to minimize dust emissions.
- f. The Grinding building, and its associated doors, vents, and windows, shall exhibit no visible emissions except for thirty (30) seconds during a six (6) minute period, as determined by EPA Method 22.

This Specific Condition has been placed in the permit as a result of air dispersion modeling performed by the Department in order to meet state and federal total suspended particulate, PM₁₀, and PM_{2.5} ambient air quality standards.

- g. Compliance with the emission limits for the dryer and the kiln (Units 21 and 22) in Table 2.1 shall be demonstrated by firing only natural gas in the kiln (Unit 22).

3. Monitoring
(20.2.72.210.C NMAC)

- a. Once each week, the permittee shall test and calculate the percent moisture content of the raw aggregate material at each material storage pile. The tests shall be conducted using ASTM methods and shall take place in the afternoon.
- b. Once each month, the permittee shall perform an EPA Method 22 to determine compliance with Condition 2.d. and 2.f. If visible emissions in excess of those

allowed in Condition 2.d. or 2.f. are observed, the permittee shall take corrective action by ceasing operations and applying water to the raw material. An EPA Method 22 shall then be performed and corrective action repeated until no visible emissions are observed.

- c. Use of natural gas containing no more than 5 grains of total sulfur per 100 dry standard cubic foot constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC.
- d. The inlet and exit static pressure (differential pressure) of the baghouse shall be monitored by the use of pressure gauges, which shall be maintained in good operating condition.
- e. If the permittee chooses to demonstrate minor source status with Option 1 from Condition 1.o., the permittee shall test the fluorine content of raw material once per calendar year.

4. Recordkeeping
(20.2.72.210.E NMAC)

- a. The permittee shall keep daily records of requirements 1, 2, and 3 and shall keep weekly records of requirement 4, below:
 - 1. The date, start time, end time, and total hours of any production or mining activity;
 - 2. The total number of haul road trips for the haul road identified in Condition 1.i. and 1.j.;
 - 3. The frequency, quantity, and location(s) of the water application(s), or equivalent control measures shall be maintained; and
 - 4. The date, time of day, location where samples were taken in the material stockpiles, and the supporting documentation and results of the moisture content calculation.
- b. The Permittee shall demonstrate compliance with the natural gas limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying the maximum total sulfur content of the fuel is 5 grains of total sulfur per 100 standard cubic feet (SCF) or less.

- c. Each calendar week, the permittee shall calculate the weekly total hours that the crusher (Unit 2), the vertical shaft impact mill (Unit 11), and the standby generator (Unit 23) operate. The permittee shall calculate the weekly rolling 52-week total hours of operation for Units 2, 11, and 23.
- d. The Permittee shall record dates of any opacity measurements and the corresponding opacity readings as required by Specific Condition 6.c.
- e. The Permittee shall maintain records of the visible emissions observations and/or repairs, and the date and the time of the testing occurring as a result of those observations, as required by Condition 3.
- f. The permittee shall maintain records of the name of the operator performing the monitoring and the training verifying opacity monitoring certification, as required by Condition 3 and Condition 6.
- g. Differential pressure across the baghouse shall be recorded once each day.
- h. If the permittee chooses to demonstrate minor source status with Option 1 from Condition 1.o., the permittee shall record the results of the test conducted per Condition 3.e.

Records required by this permit, unless otherwise noted, shall be retained at the plant site for the most recent two (2) year period and shall be made available to Department personnel upon request.

5. Reporting

(20.2.72 NMAC, Sections 210 and 212)

- a. No additional reports are required for this NSR permit, other than those cited in this permit, required by federal regulations or the Title V permit, unless the Department specifically requests submittal of certain records that are to be retained by the Permittee according to the requirements of General Condition 2.

6. Compliance Testing

(20.2.72 NMAC, Sections 210.C and 213)

- a. Initial compliance tests are required on Unit(s) No. 2, 3, 4, 5, 6, and 7 for particulate matter, and on Unit 22 for SO₂, to demonstrate compliance with the limits in Specific Condition 2. Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.

- b. These tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.
- c. For particulate matter tests, the permittee shall perform six (6) minute opacity readings for each crusher, screen and stacker conveyor (material drop to storage pile), located outside of the Grinding Facility, at least once per calendar month to demonstrate compliance with the opacity limitations in this permit. The test shall be done at the normal operational load of the facility. Compliance with this condition shall be determined by opacity test observations conducted in accordance with the procedures in 40 CFR Part 60.11 and Reference Method 9 in 40 CFR Part 60, Appendix A.
- d. Additionally, if requested by the Department in writing, the permittee shall perform six (6) minute opacity readings for each transfer conveyor at least once per calendar month to demonstrate compliance with the opacity limitations in this permit. The test shall be done at the normal operational load of the facility. Compliance with this condition shall be determined by opacity test observations conducted in accordance with the procedures in 40 CFR Part 60.11 and Reference Method 9 in 40 CFR Part 60, Appendix A.

Enclosure: Industry/Consultant Feedback Questionnaire with envelope

SECTION II: GENERAL CONDITIONS**1. Reporting**

(20.2.72 NMAC, Sections 210 and 212)

The Permittee shall notify the Department's Compliance and Enforcement Program Manager, in writing of, or provide the Department with:

- a. the anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date;
- b. the equipment serial number and the actual date of initial startup of each new or modified source within fifteen (15) days after the startup date;
- c. the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date;
- d. any change of operators within fifteen (15) days of such change;
- e. any necessary update or correction no more than sixty (60) days after the operator knows or should have known of the condition necessitating the update or correction of the permit.

2. Routine and predictable emissions during startup, shutdown, and maintenance

- a. Routine and predictable emissions during startup, shutdown, and maintenance allowed by this permit shall be recorded. The record shall include the date, the start time, the end time, a description of the event, the estimated quantity of emissions to the extent that emissions can be calculated, and any supporting documentation used to estimate emissions. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that the maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source.
- b. This permit does not allow emissions: (1) related to equipment failure or repair which do not satisfy the requirements in the first paragraph, or (2) any that could have been avoided by reasonable efforts to minimize emissions, such as good air pollution control practices, different or more frequent maintenance, different or improved operating procedures, or capital investments.

3. Records Retention

Except as provided in the Specific Conditions, records shall be maintained on-site for a minimum of two (2) years from the time of recording and shall be made available to

Department personnel upon request. Sources subject to 20.2.70 NMAC "Operating Permits" shall maintain records on-site for a minimum of five (5) years from the time of recording.

4. Posting/Retention of the Permit

The Permittee shall post a copy of this permit in plain view at the Facility at all times. If it is not possible to post a copy of the permit because the Facility is unmanned, a copy of this permit shall be kept at the nearest business office and the Permittee shall post a notice in a conspicuous place at the Facility. The notice must state the Facility name and ownership, the air quality permit number, address and phone number of the office where the permit is located, and the Air Quality Bureau address and phone number in Santa Fe. A copy of this permit shall be made available to Department personnel for inspection upon request.

5. Right to Access Property and Review Records
(NMSA 1978, Section 74-2-13)

The Department shall be given the right to enter the Facility at all reasonable times to verify the terms and conditions of this permit. The company, upon either a verbal or written request from an authorized representative of the Department, shall produce any records or information necessary to establish that the terms and conditions of this permit are being met.

6. Contents of Permit Application
(20.2.72.210.A NMAC)

Pursuant to 20.2.72.210 A NMAC, the contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision. Unless modified by conditions of this permit, the Permittee shall construct or modify and operate the Facility in accordance with all representations of the application and supplemental submittals that the Department relied upon to determine compliance with applicable regulations and ambient air quality standards. If the Department relied on air quality modeling to issue this permit, any change in the parameters used for this modeling shall be submitted to the Department for review. Upon the Department's request, the Permittee shall submit additional modeling for review by the Department. Results of that review may require a permit modification.

7. Asbestos Demolition

Before any asbestos demolition or renovation work, the Permittee shall determine whether 40 CFR 61 Subpart M, National Emissions Standards for Asbestos applies. If required, the Permittee shall notify the Department's Program Manager, Compliance and Enforcement Section using forms furnished by the Department.

8. Revisions and Modifications

(20.2.72 NMAC, Sections 200.A.2 and E, and 210.B.4)

- a. Any future physical changes or changes in the method of operation may constitute a modification as defined by 20.2.72 NMAC, Construction Permits. Unless the source or activity is exempt under 20.2.72.202 NMAC, no modification shall begin prior to issuance of a permit.
- b. Changes in plans, specifications, and other representations stated in the application documents shall not be made if they cause a change in the method of control of emissions or in the character of emissions, or will increase the discharge of emissions. Any such proposed changes shall be submitted as a revision or modification.
- c. Modifications or revisions to this permit shall be processed in accordance with 20.2.72 NMAC.

9. Notification to Subsequent Owners

(20.2.72 NMAC, Sections 7.P.1 and 212.C, 20.2.73 Section 200.E(3))

- a. The permit and conditions apply in the event of any change in control or ownership of the Facility. No permit modification is required in such case. However, in the event of any such change in control or ownership, the Permittee shall notify the succeeding owner of the permit and conditions and shall notify the Department's Program Manager, Permits Section of the change in ownership within fifteen (15) days of that change.
- b. Any new owner or operator shall notify the Department's Program Manager, Permits Section, within thirty (30) days of assuming ownership, of the new owner's or operator's name and address.

10. Permit Cancellations

(20.2.72 NMAC)

- a. The Department shall automatically cancel any permit for any source which ceases operation for five (5) years or more, or permanently. Reactivation of any source after the five (5) year period shall require a new permit.

- b. The Department may cancel a permit if the construction or modification is not commenced within two (2) years from the date of issuance or if, during the construction or modification, work is suspended for a total of one (1) year.

11. Emissions Limit Averaging Times and Energy Input Limits

Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit.

12. Testing and Records for Engines and Turbines Equipped with Emissions Controls

For engines or turbines equipped with catalytic converters and/or air-fuel ratio (AFR) controllers, or similar device which performs the same function of maintaining appropriate air and fuel ratios, records shall be made and maintained of the following requirements. The Permittee shall retain these records for a period of at least two (2) years from the date of generation and the records shall be made available to Department personnel upon request.

- a. For each AFR controlling type device, demonstrate that the manufacturer's or supplier's recommended maintenance is performed, including replacement of oxygen sensor as necessary for oxygen-based controllers. Verification of proper operation of the controller shall be demonstrated at least quarterly by measuring and recording exhaust oxygen or NO_x concentrations with a properly calibrated portable analyzer as specified in the most current version of the SOP for "Use of Portable Analyzers in Performance Tests".
- b. For any engine equipped with a non-selective catalytic converter, demonstrate the maintenance of the NO_x and CO reduction efficiency across the catalyst bed. This test shall be performed within ninety (90) days following initial startup and on a quarterly basis thereafter, unless an alternative testing schedule is specified by the Department. Properly calibrated portable analyzers are acceptable for this demonstration. The test shall be conducted at ninety percent (90%) or greater of full load and shall include the exhaust volume flow rate (dscf) and the NO_x and CO emission rate (lb/hr). (20.2.72 NMAC, Section 210.B(4)).
- c. For any engine equipped with a selective catalytic converter, demonstrate the maintenance of the CO reduction efficiency across the catalyst bed. This test shall be performed within ninety (90) days following initial startup and on a quarterly basis thereafter, unless an alternative testing schedule is specified by the Department. Properly calibrated portable analyzers are acceptable for this demonstration. The test shall be conducted at ninety percent (90%) or greater of full load and shall include

the exhaust volume flow rate (dscf) and the NO_x and the CO emission rate (lb/hr). (20.2.72 NMAC, Section 210.B(4)).

13. Operation of Engines Equipped with Catalytic Converters

- a. For engines equipped with catalytic converters, the engine shall not be operated without the catalytic converter, specifically including catalyst maintenance periods. During periods of catalyst maintenance, the Permittee shall either (1) shut down the engine(s); or (2) replace the catalyst with a functionally equivalent spare to allow the engine to remain in operation.
- b. Any engine equipped with a catalytic converter shall also have an AFR controlling device, or similar device that performs the same function of maintaining an appropriate air-fuel ratio. Engines equipped with oxidation catalysts are not required to operate with an AFR.

14. Flares

- a. Flares used as control devices to comply with any NSPS (40 CFR Part 60) or NESHAP (40 CFR Part 61) requirement shall be tested in accordance with the requirements contained in 40 CFR 60, Subpart A, General Provisions, paragraph 60.8 (performance tests) and 60.18 (general control device requirements). Flares used as control devices to comply with any MACT requirement (40 CFR Part 63) shall be tested in accordance with the requirements contained in 40 CFR 63, Subpart A, General Provisions, Section 63.7 (performance tests) and 63.11 (general control device requirements).
- b. Any flares that are operated at this Facility are authorized to have emissions resulting only from the pilot flame, unless otherwise approved by Specific Conditions of this permit.

15. Compliance Testing Procedures

If this permit requires any compliance testing, the Permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test date and allow a representative of the Department to be present at the test. The Permittee shall submit a testing protocol to the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test date and shall observe the following testing procedures:

- a. The test protocol and compliance test report shall conform to the standard format specified by the Department. The most current version of the format may be obtained from the Enforcement and Compliance Section of the Air Quality Bureau.

- b. All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of CFR Title 40, Part 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by CFR Title 40, Part 60, Appendix A:
- i. Methods 1 through 4 for stack gas flowrate
 - ii. Method 5 for TSP
 - iii. Method 7E for NOX (test results shall be expressed as nitrogen dioxide (NO₂) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO₂ is equivalent to 1.194×10^{-7} lb/SCF))
 - iv. Method 9 for opacity
 - v. Method 10 for CO
 - vi. Method 6C for SO₂
 - vii. Method 29 for metals
 - viii. Method 201 for filterable PM₁₀
 - ix. Method 202 for condensable PM₁₀
 - x. Method 320 for organic Hazardous Air Pollutants (HAPs)
 - xi. Method 25A for VOC reduction efficiency.

Alternative test method(s) may be used if the Department approves the change.

Emission limit test results for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. Test result numerical values shall not be truncated or rounded, and shall be recorded and reported to the number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data.

- c. Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).
- d. Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.

- e. Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to the approval of the Department.
 - i. Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.
 - ii. If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.
- f. Pursuant to 20.2.72.210.C NMAC, for combustion sources with stacks, the Permittee shall also provide a one-quarter (1/4) inch stainless steel sampling line adjacent to the sampling ports and extending down to within four (4) feet above ground level to provide access for future audits. The line shall extend into the stack a distance of 1/4 the stack diameter, but not less than one inch from the stack wall. The sampling line shall be maintained clear of blockage at all times. This line shall be in place at the time of any required compliance tests. For any source for which compliance tests are not required or for previously existing sources this line shall be installed no later than one hundred and eighty (180) days from the date of this permit.
- g. As an alternative, the Permittee may provide a portable sampling line that is readily available which allows the Department to safely obtain representative stack gas samples at the time of compliance audits or site inspections.
- h. A physical configuration of the Facility that conforms to the emissions testing requirements of 20.2.72.210.C NMAC and of 40 CFR 60.8(e), which is imposed under the authority of 20.2.72.210.C.4 NMAC.

16. Compliance Test Submittals

Unless otherwise specified by a Specific Condition of this permit, all compliance test reports that are required by Specific Condition 6 Compliance Testing shall be submitted to the Department as follows.

- a. Initial compliance test reports shall be submitted to the Department's Program Manager, Compliance and Enforcement within thirty (30) days from the test completion date. Additionally, a copy of each initial compliance test report that is submitted to the Department shall be retained by the Permittee as long as the Permittee owns and operates the tested unit.

- b. Periodic compliance test reports shall be retained at the Facility, or if the Facility is unmanned, at the nearest business office closest to the Facility, for no less than two (2) years from the date that the periodic compliance test was completed. Periodic compliance test reports shall be made available to Department personnel upon request.

17. General Monitoring/Compliance Testing Requirements

These requirements do not supersede or relax requirements of federal regulations.

- a. The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.
- b. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the Permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the Permittee shall notify the Department's Compliance and Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the Permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.
- c. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated as follows:
 - i. If the emission unit has operated for more than 25% of a monitoring period, then the Permittee shall conduct monitoring during that period.
 - ii. If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the Permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.

- iii. A minimum of one of each type of monitoring activity shall be conducted during any five-year period for sources not subject to 20.2.70 NMAC, Operating Permits.
- d. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the full normal load as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% load cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report that is required to be furnished to the Department.
- e. When requested by the Department, the Permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- f. Monitoring shall become effective 120 days after the date of permit issuance if the monitoring is new or in addition to monitoring imposed by an existing applicable requirement. Any pre-existing monitoring requirements incorporated in this permit shall continue to be in force from the date of permit issuance.
- g. Startup, Shutdown and Malfunction Conditions: For operations and equipment subject to an NSPS standard pursuant to 40 CFR 60, excess emissions, or operations under startup, shutdown, or malfunction shall be addressed in accordance with the requirements of 40CFR60.7(c) or 40CFR60.8(c), as appropriate. A Facility subject to a NESHAP standard pursuant to 40 CFR 63 shall comply with the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3). This condition is pursuant to 20.2.72.210 NMAC.

18. Definitions

- a. Natural gas is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot.
- b. "Daylight" is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <http://aa.usno.navy.mil/>. Alternatively, these times can be obtained from a Farmers Almanac or from <http://www.almanac.com/rise/>).

SUBMITTALS TO THE DEPARTMENT

Applications for permit revisions and modifications shall be submitted to:

Program Manager, Permits Section
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, New Mexico 87507-3113

Compliance test protocols, regularly scheduled reports, a copy of test results, and excess emission reports, shall be submitted to:

Program Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, New Mexico 87507-3113

REVOCATION

The Department may revoke this permit if the applicant or Permittee has knowingly and willfully misrepresented a material fact in the application for the permit. Revocation will be made in writing, and an administrative appeal may be taken to the Secretary of the Department within thirty (30) days. Appeals will be handled in accordance with the Department's Rules Governing Appeals From Compliance Orders.

APPEAL PROCEDURES

20.2.72.207.F. NMAC provides that any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for hearing before the Environmental Improvement Board. The petition shall be made in writing to the Environmental Improvement Board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered and attach a copy of the permitting action for which review is sought. Unless a timely request for hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or Permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or Permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to:

Secretary, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Runnels Bldg. Rm. N2153
P.O. Box 5469
Santa Fe, New Mexico 87502